This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) An electronic thermostat for use with a heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch <u>in parallel with the mechanical switch</u> through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

(currently amended) A method of heating a beverage dispenser, the method comprising:
 operating a mechanical switch to a closed circuit mode to apply power to a heater to heat
 the liquid from an initial temperature toward a target temperature, then opening the mechanical
 switch; and

operating a solid-state switch to <u>a closed circuit mode to</u> apply power to the heater to maintain the liquid substantially at the target temperature; [[and]]

wherein the mechanical switch and the solid-state switch [[being]] are controlled by, and coupled to a controller[[,]] and wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage.

3. (currently amended) In a beverage brewing apparatus, an electronic thermostat for use with a heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch <u>in parallel with the mechanical switch</u> through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating a liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

4. (currently amended) A method of heating a liquid for use with a heated beverage dispenser, the method comprising:

operating a mechanical switch to apply power to a heater to heat the liquid from an initial temperature toward a target temperature;

operating a solid-state switch <u>in parallel with the mechanical switch</u> to apply power to the heater to maintain the liquid substantially at the target temperature; and

the mechanical switch and the solid-state switch being controlled by, and coupled to a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage.

5. (currently amended) An electronic thermostat kit for use with a heated beverage dispenser having a container in which liquid is contained and a heater that is operable by electrical power to heat the liquid, the electronic thermostat kit comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch in parallel with the mechanical switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperatur; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

6. (currently amended) An electronic thermostat for use with a heated beverage dispenser having a container in which liquid is contained and a temperature modifier that is operable by electrical power to at least one of heat or cool the liquid, the electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the temperature modifier to change a temperature of the liquid from an initial temperature toward a target temperature;

a solid-switch in parallel with the mechanical switch through which electrical power is applied to the temperature modifier to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

7. (currently amended) A method of modifying the temperature of a liquid, the method comprising:

providing an electrical circuit with a mechanical switch in parallel with a solid-state switch;

operating closing a mechanical switch to apply power to a temperature modifier to change the temperature of a liquid from an initial temperature toward a target temperature, [[and]] or

operating closing a solid-state switch to apply power to the temperature modifier to maintain the liquid substantially at the target temperature.

- 8. (previously presented) The method of claim 7, wherein the temperature modifier is a cooling element.
- (new) A method of heating a liquid with a heater comprising:
 applying electrical power to the heater by closing a mechanical switch;
 providing a solid-state switch in parallel with the mechanical switch;

when the liquid reaches a predetermined temperature, closing the solid-state switch and opening the mechanical switch, and

opening and closing the solid-state switch to provide intermittent power to the heater to maintain the liquid at a predetermined temperature.

- 10. (new) The method of claim 9, further comprising;
 providing anti-arcing measures before closing the mechanical switch to prevent arcing between the contacts of the mechanical switch.
- 11. (new) The method of claim 10, wherein the anti-arcing measures include closing the solid-state switch briefly before applying electrical power to the heater by closing the mechanical switch.
- 12. (new) The method of claim 9 wherein the mechanical switch is of lower resistance than the solid-state switch.
- 13. (new) A method of cooling a liquid with a cooling mechanism comprising: applying electrical power to the cooling mechanism by closing a mechanical switch; providing a solid-state switch in parallel with the mechanical switch;

when the liquid reaches a predetermined temperature, closing the solid-state switch and opening the mechanical switch, and

opening and closing the solid-state switch to provide intermittent power to the cooling mechanism to maintain the liquid at a predetermined temperature.

- 14. (new) An apparatus for heating a liquid beverage comprising; a container for the liquid beverage;
- a heater inside the container, the heater being operable by electrical power to heat the liquid in the container;

an electronic thermostat comprising:

a mechanical switch through which electrical power is applied to the heater to increase a temperature of the liquid from an initial temperature toward a target temperature;

a solid-state switch in parallel with the mechanical switch through which electrical power is applied to the heater to maintain the temperature of the liquid at substantially the target temperature; and

a controller, wherein the controller is programmed to implement a partial or complete proportional-integral-derivative algorithm for controllably heating liquid to produce a beverage, the controller being coupled to the mechanical switch and the solid-state switch.

15. (new) The apparatus of claim 14 further comprising a temperature sensor that senses the temperature of the liquid in the container and provides feedback to the controller.

- 16. (new) The electronic thermostat of claim 14 further comprising a sensor that senses the level of the liquid in the container and provides feedback to the controller.
- 17. (new) The electronic thermostat of claim 1 further comprising a temperature sensor that senses the temperature of the liquid in the container and provides feedback to the controller.
- 18. (new) The electronic thermostat of claim 1 further comprising a sensor that senses the level of the liquid in the container and provides feedback to the controller.
- 19. (new) The apparatus of claim 2 wherein the target temperature is approximately 200 degrees Fahrenheit.
- 20. (new) The apparatus of claim 2 wherein the liquid is maintained at a temperature in the range of 180 210 degrees Fahrenheit.
- 21. (new) The apparatus of claim 9 wherein the target temperature is approximately 200 degrees Fahrenheit.
- 22. (new) The apparatus of claim 9 wherein the liquid is maintained at a temperature in the range of 180 210 degrees Fahrenheit.